# Particulate Science and Technology

*An International Journal*

Volume 13 Number 1 1995


CONTENTS


International Energy Agency Project on Flowing Granular Materials
*Stephen L. Passman and Rosalind E. Evans* 1

A Study of the Discharge of Cohesive Powders under Simultaneous Aeration and Vibration
*E. Marring, A. C. Hoffmann, and L. P. B. M. Janssen* 7

The Use of Simulated Fractals in the Analysis of Aggregates
*James W. Gentry* 23

Effect of Kernel on Aggregation or Coalescence of Large Clusters
R. V. Calabrese, S.-H. Cheng, J.-C. Lin, and J. W. Gentry 37

Contributions of Road Dust Resuspension to the Airborne Particle Concentrations in Taipei
*Jiun-Horng Tsai and Yee-Lin Wu* 55

# Particulate Science and Technology

*An International Journal*

Volume 13 Number 2 1995


CONTENTS


Template Matching for Particle Shape Description
*Nigel N. Clark and Stephanie Reilly* **69**

Prediction of Vertical Liquid-Solid Pipe Flow Using Measured Concentration Distribution
*A. S. Bartosik and C. A. Shook* **85**

Validating a Model for the Prediction of Dust Generation
*Jeffrey S. Lanning, Marianne G. Boundy, and David Leith* **105**

Numerical Prediction of Contaminant Transport and Indoor Air Quality in a Ventilated Office Space
*M. A. Yaghoubi, K. Knappmiller, and A. Kirkpatrick* **117**

Numerical Simulation of Granular Couette Flows Between Two Rough Parallel Plates
*J. Cao and G. Ahmadi* **133**

Simulation of Spray Pyrolysis for Ceramic Powder Preparation
*Hsuan-Fu Yu* **149**

# Particulate Science and Technology

*An International Journal*

Volume 13 Numbers 3–4 1995


Special Issues
**Dr. K. L. Mittal**

Guest Editors
**D. S. Rimai and A. Busnaina**

CONTENTS


About the Special Issue
*D. S. Rimai and A. Busnaina* iii

Particle Adhesion and Removal: A Review
*J. Visser* 169

Removal of Particulate Contaminants Using Ultrasonics and Megasonics: A Review
*G. W. Gale and A. A. Busnaina* 197

Aggregation During the Dissolution of Diazepam in Interactive Mixtures
*Peter Stewart and Beverley Alway* 213

Adhesion and Hydrodynamic Removal of Colloidal Particles From Surfaces
*Sanjit K. Das, Mukul M. Sharma, and Robert S. Schechter* 227

The Adhesion and Removal of Particles From Surfaces
*D. S. Rimai and A. A. Busnaina* 249

Appendix
*Bibliography of Books Edited and/or Authored by K. L. Mittal* 271

Following Page 274:
Title Page to Volume 13
Contents of Volume 13
Author Index to Volume 13